DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

February 18, 1957, Vol. IX, No. 4

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

### JUSTIN ANDREWS NAMED NIAID DIRECTOR



Dr. Justin M. Andrews

### DR. KARL F. MEYER TO GIVE DYER LECTURE ON FEBRUARY 19

The sixth annual R. E. Dyer Lecture will be given February 19 at 8:15 p.m. in the Clinical Center Auditorium by Dr. Karl F. Meyer, Director Emeritus of the George Williams Hooper Foundation, University of California Medical Center.

All NIH scientific personnel are invited to attend the lecture, which is entitled "The Natural History of Plague and Psittacosis."

Dr. Meyer, an eminent pathologist and bacteriologist, is noted for his investigations in experimental typhoid infections, botulism, brucellosis, psittacosis, and plague. His lecture will outline the present state of knowledge concerning infectious diseases.

Dr. Justin M. Andrews has been appointed by Surgeon General Leroy E. Burney to succeed Dr. Victor H. Haas as Director of NIAID. Dr. Andrews, now Associate Chief for Program, Bureau of State Services, PHS, will assume his new position in April 1957.

Dr. Haas leaves the directorship to devote full time to the fundamental microbiological studies that he has been conducting on a part-time basis for the past several years. Since his appointment as Director of NIAID in 1948, he has led the Institute through a difficult period of growth and reorganization.

Dr. Andrews is a native of Providence, Rhode Island, and is a graduate of Brown University and Johns Hopkins University. He taught at the Johns Hopkins School of Hygiene and Public Health and at the University of the Philippines, then served as director of the division of malaria and hookworm service of the Georgia Department of Public Health.

Commissioned in the Sanitary Corps of the U. S. Army during World War II, Dr. Andrews served as malaria control officer in combat areas. He was commissioned in PHS in 1946, and served as officer in charge of the Communicable Disease Center in Atlanta, Georgia. In 1953 he assumed his present position in the Bureau of State Services, where he is concerned with research and program development.

Dr. Haas has been with PHS since his graduation from the University of Cincinnati Medical School in 1931. Before coming to Bethesda, he directed malaria research at NIH laboratories in Tennessee, South Carolina, and Georgia. In the future he will continue his research on lymphocytic choriomeningitis, an acute virus disease attacking the covering membranes of the brain and spinal cord.

# DR. TABOR RECEIVES FLEMMING AWARD

Dr. Herbert Tabor received the 1956 Flemming Award for outstanding scientific achievement. He was selected by the Arthur S. Flemming Awards Commission to receive one of the ten awards presented annually to outstanding men under 40 in Government service. The awards were presented February 14 by the D. C. Junior Chamber of Commerce, at the Statler Hotel, Washington, D. C.

Dr. Tabor is Assistant Chief of the Laboratory of Pharmacology and Toxicology, and Chief of the Section on Biochemical Pharmacology, NIAMD.

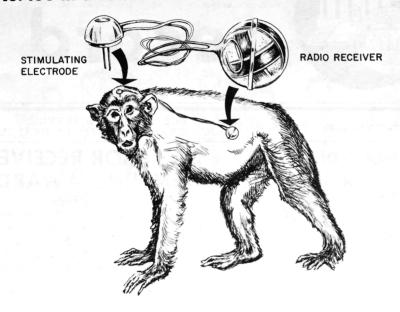
Dr. Tabor was nominated for the award in recognition of his collaborative work with Dr. S. M. Rosenthal, NIAMD, on the fundamental disturbances of fluids and electrolytes in burn shock. Their work led to the acceptance of an oral saline solution for the treatment of this condition. Use of large amounts of salt and soda solution has proved so effective

(See Award, Page 3)



Dr. Herbert Tabor

### Epilepsy Induced Artificially in Primates | Publication Preview No. 180 in a Series



This sketch shows the position of the electronic device imbedded in rhesus monkey for induction of artificial epileptic seizures.

Artificial epileptic seizures have been induced in primates by remote electronic stimulation in experiments conducted by NINDB scien-This was made possible through equipment devised by engineers in the Instrument Section of the Laboratory Aids Branch, DRS.

While this may be the first successful attempt to create such a reaction in primates, remote stimulation of nervous tissue in the bodies of experimental animals is not new. Early attempts were made with rats. but the results were meager and inconclusive.

NIH took up remote stimulation studies in 1951. Using improved methods and better equipment, NIH scientists were able to stimulate the hypothalamus of rats by means of high-frequency pulses. In 1955 the technique was further improved for the study of cerebral function in relation to motor activity and epileptic seizures in the rhesus monkey.

To conduct the experiments, many medical and engineering problems had to be solved. A radio frequency system had to be devised that would adequately stimulate electrodes in the animal's brain while he moved about freely. In addition, the receiving unit had to be implanted in the animal in the proper location for effective stimulation and control.

With the radio receiver in the abdomen and the stimulating electrode in the brain, a localized epileptic seizure spreading from the right index finger to the entire right upper extremity was produced at will by pulsing the transmitter. In order to find the exact areas of the brain that were stimulated, the animal was sacrificed at the end of the experiment and the brain tissue examined histologically.

In addition to artificial induction of epilepsy, endocrine output can be quantitatively studied in animals by remote stimulation. Such experiments still present many problems to be solved before a satisfactory system can be developed, but the results to date have been very encouraging. Improved materials and skills developed by instrument makers during fabrication of the components are adding materially to this success. The improved techniques may result in better understanding of brain function and thus bring more insight into the investigation of neurologic diseases.

The experiments are being conducted by scientists in the clinical research branches of NINDB.

The following manuscripts were received by the SRB Editorial Section between January 9 and January 31.

Arnold, F. A. The use of fluoride compounds for the prevention of dental caries.

Avigan, J., et al. The metabolism of the protein moiety of rabbit serum lipoproteins.

Birren, J. E. Some psychological aspects of

Blough, D. S. A rise in the pigeon's threshold with a red test stimulus during dark adaptation. Blum, H. F. Symposium on modern ideas of spontaneous generation.

Botwinick, J., et al. Light aversion motivation in psychological studies of aging in rats.

Botwinick, J., et al. Set as a function of age. Bragdon, J. H. Lipoprotein lipase.

Brodie, B. B., et al. Serotonin and norepinephrine may have role in central autonomic nervous system.

Burns, J. J. Biosynthesis of L-gulonic acid in rats and guinea pigs.

Burr, B. E., et al. Analysis of respiratory air samples with the mass spectrometer.

Burton, R. M. The pyridine nucleotide and diphosphopyridine nucleotidase levels of the brain of young rats.

Chapman, K. W. The addict and the community. Eden, M. A probabilistic model for morpho-

Evarts, E. V. Neurophysiological correlates of pharmacologically induced behavioral disturbances.

Felix, R. H. New scientific developments in the mental health field.

Galioni, E. F., et al. The nature and purposes of mental hospital wards.

Glenner, G. G., et al. Esterase and phosphatase activity in Necturus maculosus. A study in comparative histochemistry.

Goodrich, D. W., et al. Problems of fostering psychiatric patients involvement in activities.

Guth, L. The effects of glossopharyngeal nerve transection on the circumvallate papilla of the rat.

Gutter, F. J., et al. Sedimentation behavior of horse carbon monoxide hemoglobin at low pH in the presence of mercaptoethanol and urea.

Havel, R. J. Early effects of fasting and of carbohydrate ingestion on lipids and lipoproteins of serum in man.

Havel, R. J. Early effects of fat ingestion on lipids and lipoproteins of serum of man.

Haverback, B. J., et al. Gastric mucosal erosion in the rat following administration of the serotonin precursor, 5-hydroxytryptophan.

Hawkins, J. E., et al. The anticonvulsant potencies of 2-pyrrolidinone, gamma-aminobutyric acid, and L-asparagine and the value of 3-methyl-3-ethylglutarimide as a convulsant test compound: Pharmacological and cerebral metabolic studies.

Heppel, L. A., et al. Studies on polynucleotides synthesized by polynucleotide phosphorylase. I. Structure of polynucleotides with one type of nucleotide unit.

Horning, M. G., et al. Studies on the enzymatic degradation of the cholesterol side chain. II. Requirements of the mitochondrial system.

Jacobs, L. Toxoplasmosis: Interrelationships of swine, dog, and human infections.

Kohls, G. M. Ixodes downsi, a new species of tick from a cave in Trinidad, British West Indies (Acarina-Ixodidae).

Law, L. W. Present status of nonviral factors in the etiology of reticular neoplasms of the mouse.

Lerner, A. M., et al. Cultivation and virus susceptibility of human chorion cells. Levintow, L., et al. The role of glutamine

in protein biosynthesis in tissue culture.

Massopust, L. C. Stereotaxic atlas of the diencephalon of the albino rat.

McCalla, C., et al. C14O<sub>2</sub> excretion after the intravenous administration of albumin-bound palmitate-1-C14 to intact rats.

Mirsky, A. F., et al. The effects of cingulectomy on social behavior in monkeys.

Mitoma, C., et al. Biochemical and pharmacological studies on o-tyrosine and its meta and para analogues. A suggestion concerning phenyl-ketonuria.

Mitoma, C., et al. On the nature of the enzymatic defect in phenylpyruvic oligophrenia.

Moloney, J. B. Inhibition of Rous sarcoma virus by oxidized tumor lipides.

Morrow, A. G., et al. Successful surgical repair of a ruptured sinus of Valsalva aneurysm.

Mosley, V. M., et al. X-ray microradiography of tissue sections with magnesium radiation. Nylen, M. U., et al. A modified Spencer

microtome for thin sectioning.

Orloff, J. Edema in chronic congestive heart failure.

Paik, K. W., et al. Epsilon-lysine acylase. Riggle, G. C., et al. Remote stimulation of cortical areas in primates.

Rothberg, S., et al. Studies on the mechanism of enzymatic decarboxylation.

Russell, A. L. A social factor associated with the severity of periodontal disease.

Saslaw, L. D., et al. Preparation of malonaldehyde bis-bisulfite, sodium salt.

Schmid, R., et al. The enzymatic formation of bilirubin glucuronide.

Seegmiller, J. E., et al. The metabolic origin of uric acid.

Sessoms, S. M. Guiding principles in clinical

research using investigational drugs.
Sharpless, N. E., et al. The infrared spectra

of some heteropoly acid salts.
Shelokov, A. The visit of the Soviet Polio-

myelitis Team to the United States.
Stewart, S. E., et al. Lymphocytic choriomeningitis virus as related to chemotherapy studies and to tumor induction in mice.

Stewart, W. H. Acute diarrheal diseases. Tower, D. B. Some neurochemical factors affecting cerebral function and activity.

Udenfriend, S., et al. Effect of iproniazid on serotonin metabolism in vivo.

von Brand, T. Recent trends in parasite physiology.

Waalkes, T. P., et al. Serotonin and histamine release during anaphylaxis in the rabbit.

Walker, G. N. Synthesis of methoxyhydrophenanthrenes and methoxyhydrocyclohepta anaphthalenes by acylation of ketones with homoveratric anhydride.

Wilson, H., et al. Steroids in the blood and urine of female mice bearing an ACTH-producing pituitary tumor.

Windle, W. F. Regeneration in relation to the process of aging in the nervous system.

Wittman, M. Significance of new scientific developments in the mental health field for social work education.

Wood, H. B., et al. 1-0-Benzoyl-a-D-talopyranose.

Wood, H. B., et al. 1,2:3,5-Di-0-benzyl-idene-a-D-glucose.

Young, M. D. Resistance of Plasmodium malariae to pyrimethamine (Daraprim).

#### NIH RECORD

Published by
Scientific Reports Branch
Division of Research Services
National Institutes of Health
Room 212, Building 8
Bethesda 14, Maryland
OLiver 6-4000 Ext. 2125

### NIH Spotlight



Margaret C. Eurich

The task of setting the wheels in motion to award cash prizes and recognition to many deserving NIH employees keeps Margaret Eurich bustling from morning till night. As Incentive Awards Analyst in the Personnel Branch, DBO, Margaret takes a personal and active interest in each award. Her energy and contagious enthusiasm are very important in promoting the awards program at NIH.

Margaret often speaks to secretarial groups, supervisors' meetings, and other organizations to stir up interest and participation in the program, which is extensive and many-sided. She frequently takes the initiative in assisting and encouraging employees to submit award applications, and her delightful warmth and charm have endeared her to many at NIH.

When a suggestion is submitted by an employee, or an honor award is indicated, Margaret often assists a supervisor in writing up the award application. She then submits an opinion as to the practicality of the suggestion or consults a person who is qualified to evaluate it. Once this is done, the material is ready to go to the Board on Employee Awards, of which Margaret is the executive secretary.

After the Auxiliary Board has reviewed an award, it is submitted to the NIH Director for approval. Margaret then arranges a presentation ceremony. When the fortunate employee or group receives the award, she is undoubtedly the proudest person present.

Margaret stresses that even the smallest and most insignificant suggestion may merit an award if

# J. M. MITCHELL ACCEPTS POST IN CALIFORNIA

Joseph M. Mitchell, Administrative Officer, DRS, left NIH February 10 to become the Assistant Manager of Culver City, California.

Calvin B. Baldwin, Jr., will replace Mr. Mitchell as DRS Administrative Officer. Mr. Baldwin has been Budget Examiner for General Research and Services Appropriations. He has been at NIH since 1953, and with PHS since 1951.

Mr. Mitchell, who came to NIH in September 1956, was formerly comptroller of an Ordnance Group in Germany.

### AWARD Contd.

that it has been adopted for civil defense treatment of mass casualties.

Other contributions by Dr. Tabor concern the metabolic effect of histamine and the role of folic acid in histidine metabolism.

Former NIH award winners are Dr. David B. Scott, NIDR, Dr. Leon Jacobs, NIAID, Dr. James M. Hundley, NIAMD, and Mr. Albert F. Siepert, OD.

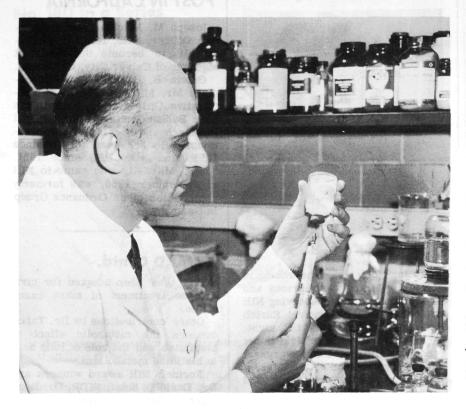
it saves time or money, and she warmly encourages more employees to take advantage of the awards program.

Margaret has been handling awards efficiently at NIH for the last year and a half. She came to NIH in 1951, after working for the Navy Department and Maritime Service in St. Petersburg, Florida, and for the Scripps-Howard newspapers. Most of her youth was spent in Florida, where she attended high school and junior college before transferring to Miami University of Ohio.

In 1949 the spirit of adventure led Margaret to embark on a vacation trip to Europe with her three daughters. She was so charmed she stayed for two wonderful years to explore the sights of Germany, Italy, and France. During a tour of France, she travelled the route Joan of Arc followed in her historic struggle against the English invaders.

Three growing daughters keep Margaret busy, but she still finds time for an occasional game of golf, or to pursue her favorite hobbies of exploring old houses and touring colonial Williamsburg.

#### **HUNGARIAN RECEIVES VISITING SCIENTIST POST**



Dr. Lajos Csizmas, Visiting Scientist from Budapest, Hungary, continues his research in the Laboratory of Bacterial Products, DBS.

Dr. Lajos Csizmas, Hungarian immunologist, has been appointed Visiting Scientist in the Laboratory of Bacterial Products, DBS. Dr. Csizmas, who was concerned with the production and testing of biological products in Hungary, is well equipped to fit into DBS research activities.

Born and educated in Budapest, Dr. Csizmas holds an M.D. degree and a specialist certificate in internal medicine. After practicing medicine for several years, he joined the Human Institute of Serobacteriologic Preparations as an immunologist.

His interest in pertussis vaccine led Dr. Csizmas to contact Dr. Margaret Pittman, Chief of the Section on Haemophilus Studies, DBS, who has been instrumental in arranging for him to come to NIH. Before his appointment on January 21, Dr. Csizmas was awarded a temporary Rockefeller Foundation Fellowship.

Dr. Csizmas and his fiancee, now his wife, made two harrowing attempts to escape from Hungary. Finally, they waded an icy channel one stormy night and crossed the border into Austria.

### DRS EMPLOYEES ASSUME NEW POSTS

Lloyd M. Runkle, previously Acting Chief of the Research Facilities Planning Branch, DRS, has transferred to the Water Supply and Water Pollution Control Branch, Bureau of State Services, PHS. Mr. Runkle has been at NIH since February 1954, and has been acting as liaison with Public Buildings Service, GSA, and the contract architects in the planning of all construction at NIH.

Mr. Runkle has been employed in the Government since 1925. Before coming to NIH he was with the Public Buildings Service.

Donald L. Snow, formerly Chief of the Sanitary Engineering Branch, DRS, has temporarily replaced Mr. Runkle as Acting Chief of the Research Facilities Planning Branch. Harry Stierli is now Acting Chief of the Sanitary Engineering Branch.

Francis S. Taylor recently assumed his new position with the Division of Building Management, Public Building Administration. Mr. Taylor has been Assistant Head of the Construction and Shops Section, DRS, since 1952. He came to NIH in 1937.

## UTERINE CANCER TESTS OFFERED AT NIH

Cytologic tests for uterine cancer will be available to NIH women employees beginning February 18. Forms will be distributed to all women employees and should be returned promptly. Extra forms may be obtained at the Employee Health Service in the Clinical Center.

Almost every case of cervical cancer is completely curable if detected at an early stage. The tests have been given annually at NIH for the past three years to detect the cancer before it has an opportunity to spread.

The cell examination, or Papanicolaou test, is simple, quick, and painless. Participation is voluntary, and the results of the tests will be confidential.

The program is sponsored jointly by NCI and the Employee Health Service.

### NIH Photographer Elected to Council

Vernon Taylor, Assistant Chief of the Photography Section, Scientific Reports Branch, DRS, has been elected to the National Council of the Photographers' Association of America for 1957. The Council is the governing body of the Photographers' Association of America, which is the largest professional photographers' group in the United States. Representatives from all 48 States, D. C., and Canada are elected to the Council each year.

Mr. Taylor has been with the NIH Photography Section since 1948. He attended Quincy College, Quincy, Illinois, and George Washington University. Mr. Taylor has also studied at the Corcoran School of Art in Washington, D. C. Before coming to NIH he spent four years with the U. S. Army, teaching chemical warfare and photography.

# Union Open To NIH Employees

Lodge 1690 of the American Federation of Government Employees, AFL-CIO, is opening membership to all NIH employees February 1. Meetings are held the second Monday of each month at 8:00 p.m. in Wilson Hall. All interested employees are invited.

Further facts and announcements will be posted on NIH bulletin boards.